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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,988	03/22/2000	David Barach	2386.2001-000	8379
21005	7590	03/25/2004	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			RYMAN, DANIEL J	
		ART UNIT	PAPER NUMBER	/18
2665				
DATE MAILED: 03/25/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/532,988	BARACH, DAVID
	Examiner	Art Unit
	Daniel J. Ryman	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 March 2000.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-40 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/29/2004 have been fully considered but they are not persuasive. On page 11 of the Response, Applicant argues that the underlined portion of “reporting … statistical data … in response to being polled for a reason other than for the statistical data” was not included previously in the claims. Applicant further argues that the cited prior art teaches away from the newly added limitations. Examiner, respectfully, disagrees. The newly added portion was submitted in place of “when polled a) for the statistical data or b) for some other reason”. Thus the newly added limitation was included in the previously presented claims, albeit using different wording. In addition, by substituting the newly added limitation for the previous limitation, the scope of the claim has been broadened since the claim no longer states that the element is polled for the statistical data. Since the amendments to the claims do not contain new limitations, Examiner maintains that the cited prior art renders the claims obvious.
2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant argues that the cited references do not teach reporting the statistical data in response to being polled for a reason other than for the statistical data since Applicant's disclosed prior art and Allen only teach reporting data when polled and Naimpally does not teach reporting data when polled. Examiner agrees that when taken individually the references do not teach the claimed limitation; however, the rejection is based on a combination of references. As such, Examiner maintains that the

combination of references teaches the disclosed limitations. Applicant's prior art teaches reporting statistical data when polled for statistical data and transmitting a null packet when polled for another reason. Naimpally discloses transmitting substantive data in place of a null packet in order to increase bandwidth efficiency. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to report the statistical data in response to being polled for a reason other than for the statistical data in order to increase bandwidth efficiency.

3. Given the above arguments, Examiner maintains the rejections of the claims as being obvious in view of the cited prior art. Examiner suggests adding limitations to the claims in order to distinguish the claimed invention from the cited prior art. For instance, Applicant discloses but does not expressly claim that the element is *only* polled if the age of the statistical data in the controller is older than a defined threshold indicating that statistical data was not timely sent using a null packet (specification: page 14, lines 1-10). Such limitations have not been examined in the context of prior art rejections and could distinguish the claimed invention from the prior art if added to the claims.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 8 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with

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which it is most nearly connected, to make and/or use the invention. Claims 8 and 37 disclose that "the element makes the statistical data available as often as necessary but not so often that the buffer is congested by the statistical data". The specification discloses that the element pre-gathers the statistical data as often as necessary but not so often that the buffer is congested by the statistical data (specification: page 11, lines 23-24. For the purpose of prior art rejections of claims 8 and 37, Examiner will interpret "the element makes the statistical data available as often as necessary but not so often that the buffer is congested by the statistical data" to be "the element pre-gathers the statistical data as often as necessary but not so often that the buffer is congested by the statistical data".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's disclosed prior art (referred to herein as Applicant) in view of Allen et al (USPN 5,495,522) in further view of Naimpally et al (USPN 5,650,825).

8. Regarding claims 1, 10, 19, 20, 26, 32, 33, 39, and 40, Applicant discloses a system, method, apparatus, and computer program for gathering statistical data from at least one element (line card) in a multiprocessor system employing a half-duplex bus by a system controller, where Examiner takes official notice that computer programs are well known in the art, comprising the steps of or means for: gathering statistical data, about a high-speed port, from at least one

element (line card) in a multiprocessor system employing the half-duplex bus (page 3, line 11-page 4, line 20); and reporting the statistical data from the buffer to a system controller when polled by the system controller for the statistical data (page 5, line 9-page 6, line 6). Applicant does not disclose automatically pre-gathering the statistical data in an information buffer in a controlled manner by an element of the multi-processor system; however, pre-gathering information and storing the information for later retrieval is very old and well known in the art. For instance, Allen teaches, in a system employing line cards, automatically pre-gathering the statistical data in an information buffer (register) in a controlled manner by an element (T1 card) where it is implicit that is done in order to provide at the time of collection the statistical data collected over a period of time (col. 76, lines 17-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to automatically pre-gather the statistical data in an information buffer in a controlled manner by an element where it is implicit that is done in order to provide at the time of collection the statistical data collected over a period of time. Applicant in view of Allen does not disclose reporting the statistical data from the buffer to a system controller in response to being polled for a reason other than for the statistical data; however, Applicant in view of Allen discloses that a null is sent to the controller when the element is polled for some other reason (Applicant: page 5, line 9-page 6, line 6). Naimpally discloses, in a data transmission system, transmitting substantive data in place of null messages in order to take advantage of the "wasted resources of a NULL packet" (col. 2, line 57-col. 3, line 43; col. 4, line 66-col. 5, line 5; and col. 12, lines 1-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit statistical data to the system controller when polled for some other reason in order to take advantage of the wasted resources

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of the NULL packet that is typically transmitted in response to a poll for some other reason. Thus Applicant in view of Allen in further view of Naimpally discloses that the automatic pre-gathering and subsequent reporting reduces the number of communications and data transfer cycles required to transfer the statistical data from the element to the system controller resulting in a reduction of bandwidth consumed by gathering the statistical data about the elements via the half-duplex communication bus.

9. Regarding claims 2, 11, 21, 27, and 34, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the statistical data is reported (Applicant: page 3, line 11-page 4, line 20 and page 5, line 9-page 6, line 6 and Naimpally: col. 2, line 57-col. 3, line 43 and col. 4, line 66-col. 5, line 5). Applicant in view of Allen in further view of Naimpally does not expressly disclose that the buffer is organized in a queue and the statistical data is reported after the statistical data has reached the head of the queue; however, Examiner takes official notice that organizing data into a queue in a storage element and reading data that is at the head of the queue is very old and well known in the art.

10. Regarding claims 3 and 12, referring to claims 1 and 10, Applicant in view of Allen in further view of Naimpally discloses that the element is a line card having at least one processor monitoring at least one communication port (Applicant: page 3, line 11-page 4, line 20).

11. Regarding claims 4 and 13, referring to claims 1 and 10, Applicant in view of Allen in further view of Naimpally discloses that the system reports the gathered statistical data to a central statistical data gathering system (Applicant: page 3, line 11-page 4, line 20 and Allen: col. 76, lines 17-37).

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12. Regarding claims 5, 14, 22, 28, and 35, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the statistical data includes information about an element communication port (Applicant: page 3, line 11-page 4, line 20). Applicant in view of Allen in further view of Naimpally does not expressly disclose that the buffer stores only one instance of information about a communication port at any given time; however, Applicant in view of Allen in further view of Naimpally do disclose storing at least one instance of information about a communication port at any given time (Applicant: page 3, line 11-page 4, line 20 and Allen: col. 76, lines 17-37). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to store a single instance because it would have been obvious to store any number of instances absent a showing of criticality by the Applicant. In addition, it is implicit that buffers have a finite capacity. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to store only a single instance of information about a communication port at any given time in order to minimize the size of the buffer required for the device.

13. Regarding claims 6, 15, 23, 29, and 36, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the element makes

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statistical data regarding respective ports available at least as often as the system controller requires the statistical data (Applicant: page 3, line 11-page 4, line 20 and page 5, line 9-page 6, line 6; Allen: col. 76, lines 17-37; and Naimpally: col. 2, line 57-col. 3, line 43 and col. 4, line 66-col. 5, line 5).

14. Regarding claims 7 and 16, referring to claims 1 and 10, Applicant in view of Allen in further view of Naimpally discloses that the element makes the statistical data available at least one time per second (Applicant: page 3, line 11-page 4, line 20).

15. Regarding claims 8, 17, 24, 30, and 37, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally does not expressly disclose that the element makes the statistical data available as often as necessary but not so often that the buffer is congested by the statistical data; however, Examiner takes official notice that it is well known in the art to avoid buffer congestion since this results in loss of data due to buffer overruns.

16. Regarding claims 9, 18, 25, 31, and 38, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the element reports statistical data in place of reporting a null response (Naimpally: col. 3, lines 27-43 and col. 4, line 66-col. 5, line 5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel J. Ryman
Examiner
Art Unit 2665

Daniel J. Ryman


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